MICHIGAN DEPARTMENT OF HEALTH & HUMAN SERVICES

Michigan Regional Trauma Report

Region 1



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EXECUTIVE SUMMARY

Region 1 is home to Lansing, Michigan's capital. The 2010 Census places the city's population at 114,297, making it the fifth largest city in Michigan. The area is home to: two medical schools, one veterinary school, two nursing schools, two law schools, a big ten university, the Michigan State Capitol, and headquarters for four national insurance companies.

The 9 Counties that make up Region 1 are Clinton, Eaton, Gratiot, Hillsdale, Ingham, Jackson, Lenawee, Livingston and Shiawassee. As of the 2013 census, the population of Region 1 was 1,068,290.



The region has 14 Hospitals, 104 Emergency Medical Services (EMS) agencies and 8 health departments. Many of the counties surrounding the capital are rural farming communities.

The Regional Trauma Network (RTN), working with the Region 1 trauma advisory committee developed bylaws consistent with state administrative rules, and submitted a Regional Trauma Network application to the Michigan Department of Health & Human Services (MDHHS), which was approved. The RTN was then recognized by MDCH. The RTN work plan included in the application addresses injury prevention, access to the system, communications, medical oversight, pre-hospital triage criteria, trauma diversion policies, trauma bypass protocols, regional trauma treatment guidelines, regional quality improvement plans, and trauma education.

The RTN has been tracking and documenting ongoing system development activity, and publishes quarterly and annual reports that describe progress toward system development and on-going activity.

SYSTEM GOVERNANCE

The Region 1 Trauma Network (RTN) is made up of the medical directors and/or their chosen representative from the 7 Medical Control Authorities (MCAs). The membership of the RTN was been very active in the creation of the network application, as well as the ongoing monitoring of the work plan and goals. Each member of the RTN is active in the Regional Trauma Advisory Committee's (RTAC), which is actively looking at MCA protocols, EMS triage criteria, and the creation of regional destination protocols.

The RTAC is comprised of representatives from each of the region's 13 hospitals, EMS representatives from each MCA, as well as other regional partners. The RTAC has 3 central focuses, which are addressed through the Data, Injury Prevention and Operations Groups. Region 1 has 1 verified trauma center and 1 hospital in the process of verification by the American College of Surgeons (ACS) Committee on Trauma. The region is directing energies and emphasis on the building blocks that regional facilities will need to develop their individual trauma centers.

The leadership for the RTN is very actively working towards a statewide trauma system. The hospital representatives from the RTAC have been very willing to assist with meeting venues, training centers, and staff to assist with training in areas such as data collection, injury prevention, and patient care.

Trauma center staffs have offered resources such as trauma flow sheet templates, trauma activation criteria, and staff education to hospitals that are in the beginning stages of this process.

OVERALL PROGRESS

In the overall scoring of the Region 1 trauma network against the *Model Trauma System Planning* benchmarks published by Health and Human Services Health Resources and Services Administration in 2006, Region 1 had a total score of 35. Many areas were scored as either not having developed, or having minimal development. This helped the RTN and RTAC focus discussion and planning on how to strengthen and advance current processes in order to support the regional trauma system. Assessments of hospitals were conducted to ascertain what injury prevention programs they have, what level trauma center they anticipate they will work towards, and what systems needs each facility has in order to submit data to the state.

Region 1 will be providing data training to hospital staff outlining which hospitals need to collect data and basic training on the use of ImageTrend software to enter this data into the trauma registry. The RTAC has also decided that in 2015 a half day seminar will be offered to hospitals providing technical assistance about becoming a trauma center.

The RTN began meeting in 2010, and developed bylaws per the administrative rules. In 2013, the RTN revised the bylaws, and they were presented to the RTAC membership and approved. In the first year post application submission, the RTN has focused on reviewing all the MCA policies affecting trauma, and establishing ground work within the MCAs and hospitals to identify potential verification levels, begin the process of data collection and submission, and building resources to meet the ACS and state verification and designation requirements. The RTAC has been focused on establishing subcommittees to assist with the processes required by the administrative rules (data collection, injury prevention, and performance improvement) to meet verification and designation requirements.

To assure vital collaboration efforts are being addressed, the region has reached out to hospitals, EMS, health departments, and other partners to encourage participation in regional meetings and solicit input on plans. The RTN also sent out a letter to all hospital executives responsible for the trauma/emergency service line updating them on regional progress.

2014 ACCOMPLISHMENTS

The RTN, with the assistance of the Region 1 trauma coordinator, reached out to all the regional partners and greatly increased RTAC membership and meeting attendance. All the hospitals in Region 1 have stated they will participate in the regionalization process, and have agreed to put processes in place to begin collecting and submitting data.

2015 MAJOR FOCUS

One of the major focuses for 2015 will be on having all Region 1 hospitals collecting and submitting data. This will be accomplished through continued education and technical support. Once a facility has accomplished this task, the RTN will assist the facility as they put the processes in place to begin functioning as a trauma center. The Steering Committee is comprised of trauma subject matter experts who have the knowledge and resources to provide assistance with obstacles facilities may encounter and are willing to share their expertise. The RTN would also like to begin discussing regional triage and destination protocols.

DEVELOPING THE REGIONAL TRAUMA NETWORK

According to the American College of Surgeons, "an ideal trauma system includes all the components identified with optimal trauma care, such as injury prevention, access to the trauma system, pre-hospital care and transportation, acute hospital care, rehabilitation, and research activities. The term *inclusive* trauma system is used for this all-encompassing approach, as opposed to the term *exclusive* system, which focuses only on the major trauma center."

The State of Michigan's trauma system development is making great progress. This progress represents the commitment of the hospitals, partners, and stakeholders in order to organize an accountable, coordinated, regional system of care for trauma.

This regionalized system of care requires an active, engaged RTN and Regional Trauma Advisory Committee (RTAC). The network is comprised of one representative from each MCA. An MCA is by definition, a hospital or group of hospitals that operates a service that treats patients 24 hours a day 7 days a week. This RTN representative is expected to make decisions and commitments on behalf of their MCA (hospitals) to collectively further the work and mission of the RTN, as the voice for the MCA hospitals.

The RTN is the governing body of the regional network, and ultimately responsible for decisions, policy, procedure, and any subcommittee work related to trauma in each of the state's 8 regions, including the work of the RTAC.

Each RTN appoints members from the region's medical community to participate in the RTAC. The RTAC is a committee established by the RTN and comprised of MCA personnel, EMS personnel, life support agency representatives, healthcare facility representatives, physicians, nurses, and consumers.

The functions of the RTAC are to provide leadership and direction in matters related to trauma systems development in their region, and to monitor the performance of the trauma agencies and healthcare facilities within the region, including, but not limited to, the review of trauma deaths and preventable complications. Each hospital in Region 1 has representation on the RTAC, and the group is working on injury prevention, data collection, medical oversight, and other initiatives.

EPIDEMIOLOGY

Every individual in the world is at risk for traumatic injury. The kinds of injuries are as diverse as the backgrounds of the victims. Traumatic injuries range from domestic violence and terrorism, to motor vehicle crashes and workplace accidents. Although trauma is often thought of as an individual event affecting the person or people directly involved in the accident, traumatic injury needs to be seen as a disease – one that affects all ages, races, and genders. This disease is acute in onset but often results in chronic, debilitating health problems that have effects beyond the individual victims. There are identifiable broad trends in the epidemiology of trauma within certain age groups and areas of the country, but injury has an impact in every community regardless of demographics¹. According to the National Trauma Institute using data from the CDC:

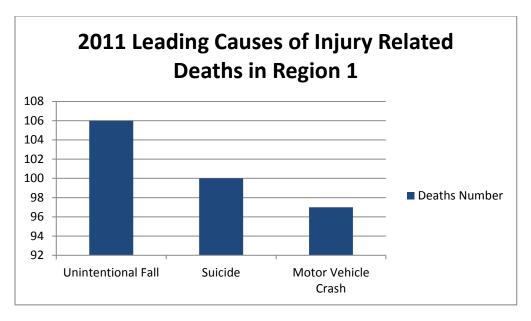
- Trauma is the #1 cause of death for Americans between 1 and 44 years old
- Trauma is the #3 cause of death overall

¹ Cinat ME, Wilson SE, Lush S, Atkins C: **Significant correlation of trauma epidemiology with the economic conditions of a community.** *Arch Surg* 2004, **139**:1350-1355

- Trauma injury accounts for 30% of all life years lost in the U.S
- The economic burden of trauma is more than \$406 billion annually
- Each year, more than 180,000 people lose their lives to trauma

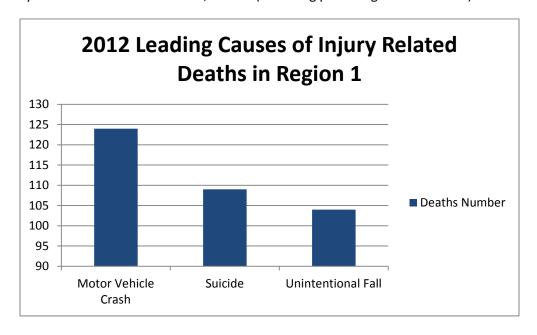
In Region 1, the three leading causes of death are from injury motor vehicle crashes, suicide, and falls. The three leading injury related hospitalizations are due to falls, motor vehicle crashes, and intentional self-harm or suicide attempts. The Region 1 Injury Prevention Committee utilizes this information, along with the injury prevention plans of our trauma centers, to help create a regional injury prevention plan that all our hospitals and EMS agencies will participate in.

In Region 1 the top three leading causes for injury related deaths in 2011 are as follows: falls, suicide (excluding poisoning and overdoses) and motor vehicle crashes. In 2012 they include:



Source: Thomas W. Largo, MPH, Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Health & Human Services, 2011 data.

In 2012 they include: motor vehicle crash, suicide (excluding poisoning and overdoses) and falls.



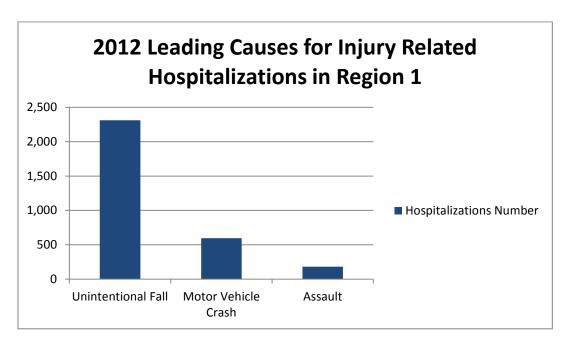
Source: Thomas W. Largo, MPH, Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Health & Human Services, 2012 data.

In 2011 the top three causes for injury related hospitalizations include: Falls, motor vehicle crashes and assaults.



Source: Thomas W. Largo, MPH, Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Health & Human Services, 2011 data.

In 2012 the top three causes for injury related hospitalizations in Region 1 include: falls, motor vehicle crashes and assaults.



Source: Thomas W. Largo, MPH, Division of Environmental Health, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Health & Human Services, 2012 data.

It is from these epidemiological trends that the Region 1 Injury Prevention Committee bases what regional injury prevention initiatives will be the focus of our planning and outreach. Region 1 is focusing on falls and passenger restraints during this first application cycle.

THE REGIONAL WORK PLAN

Michigan Administrative Rule 325.132 requires that each regional network submit a comprehensive system development plan as a component of the application for recognition as a Regional Trauma Network (RTN). The RTN met as a group first and decided on some basic objectives for each of the 11 required application components. Once this was completed, the RTN and RTAC met as a group and assessed the current status of the region's trauma system. The RTN and RTAC members then took on the task of writing SMART objectives (Specific, Measurable, Attainable, Relevant, and Time-bound) for each indicator, with the understanding that progress towards a mature, fully functioning, all inclusive regional trauma system is the goal. These written objectives will serve as the region's system development plan for the first 3 years of the regionalization process.

The application asked each region to address the 11 required components listed in the State of Michigan trauma system administrative rules. The components are:

- 1) System governance
- 2) Injury prevention
- 3) Access to the system

- 4) Communications
- 5) Medical oversight
- 6) Pre-hospital triage criteria
- 7) Trauma diversion policies
- 8) Trauma bypass protocols
- 9) Regional trauma treatment guidelines
- 10) Regional quality improvement plans
- 11) Trauma education

Each of the following eleven subsections corresponds with the eleven work plan components. The sub-section begins with the 2006 HRSA *Model Trauma System Planning and Evaluation* indicator followed by progress toward that indicator during FY 2014 ("achievements") and concluding with objectives for 2015 in paragraph form (where we are going).

SYSTEM GOVERNANCE

Each region shall establish a regional trauma network. All MCAs within a region must participate in a regional network, and life support agencies shall be offered membership on the regional trauma advisory council. RTSCs shall maximize the inclusion of their constituents. The regional trauma network establishes a process to assess, develop, and evaluate the trauma system in cooperation with the regional stakeholders in trauma care.

ACHIEVEMENTS

The goal Region 1 identified for system governance was that the RTN leadership maintain 100% of the RTN and RTAC meeting minutes and attendance records, including individual committees, and include this information in end of year report submissions. Meeting agendas, minutes and action items will be disseminated to both groups. There will be regular opportunities for the RTN, RTAC and subcommittees to interact and/or report on work being done. This information will be used to describe progress in the annual report.

The RTN and RTAC meet quarterly and maintain meeting minutes and attendance records they are disseminated to the members at meetings or upon request. The committees meet at least quarterly, and more often if needed.

2015 FOCUS

In 2015 the RTN and RTAC will continue to meet at least quarterly, and work on increasing committee membership. As the region moves the trauma system forward, more committee work will be needed to reach the stated goals. The standing committees are: Operations, Data, and Injury Prevention.

In 2015 a new committee will be formed to provide support and technical assistance for the hospitals working towards verification. The Data Committee will be planning additional projects after considering what data the RTN and RPSRO will want to utilize for performance improvement. The Injury Prevention Committee will be working on furthering regional injury prevention initiatives, and creating a written injury prevention plan.

Lastly, the region will look at how making regional information, including meeting minutes, accessible to the membership.

INJURY PREVENTION

The RTN, in cooperation with other agencies and organizations, uses analytical tools to monitor the performance of population-based (regional) injury prevention programs.

ACHIEVEMENTS

All ACS verified facilities in the Region 1 shared their current trauma related injury prevention plans with the RTN. These plans were used to inform the development of a region specific injury prevention plan. The framework for the regional plan includes specific strategies to address the regionally identified issues of Motor Vehicle Crash/Child Passenger safety and Falls/Drivers, and safety in the elderly population.

The RTAC created a subcommittee, tasked with developing a strategic plan to address region wide injury prevention initiatives. The subcommittee developed and disseminated a survey that queried the injury prevention programs in the Region 1 facilities. The information from this survey was then used to create a Region 1 Injury Prevention resource guide, which identifies the programs offered by each facility and the injury prevention contact.

2015 FOCUS

In 2015 the Injury Prevention Subcommittee will work to expand the resource guide to include injury prevention programs offered by EMS. The committee will also begin the framework for a written regional injury prevention plan. The RTN and RTAC will explore the best way to collect available Region 1 injury data, which will be used to provide guidance on regional injury prevention plans. This data, once available, will be monitored quarterly.

CITIZEN ACCESS TO THE SYSTEM

The trauma system is supported by EMS medical oversight of dispatch procedures and coordinated response resources. The trauma system EMS medical directors are actively involved with the development, implementation, and ongoing evaluation of EMS system dispatch protocols to ensure they are congruent with the trauma system design. These protocols include, but are not limited to, which resources to dispatch (Advanced Life Support v Basic Life Support), air-ground coordination, and early notification of the trauma facility, pre-arrival instructions, and other procedures necessary to ensure dispatched resources are consistent with the needs of injured patients. There are sufficient, well-coordinated air and ground ambulance resources to ensure that EMS providers arrive at the trauma scene to promptly and expeditiously transport the patient to the correct hospital by the correct transportation mode.

ACHIEVEMENTS

The RTN reviewed all MCA trauma and communication protocols to determine if destination criteria for trauma patients have been met. The RTN will continue to review these protocols yearly for adherence to state guidelines. The RTN utilized the district 1 communication inventory for all facilities and EMS agencies which ensures communication channel usage by the MCA and its corresponding hospitals for both daily communication and all hazards response communications, and validation from each Region 1 EMS Agency and Hospital, that their facility is maintaining the Hospital Emergency Radio Network (HERN).

2015 FOCUS

The RTN will assign a committee to define which high acuity trauma patients to be reviewed by the Regional Professional Standards Review Organization (RPSRO). Once this definition of what the RTN considers a high acuity trauma patient, the committee will develop a process to request and receive feedback from destination hospitals regarding care of high acuity trauma patients on quarterly basis. This data will be used for regional process improvement. The committee will also need to create a process to obtain hospital and EMS agency data for evaluation by the MCAs and the RPSRO regarding EMS related trauma calls.

TRAUMA SYSTEM COMMUNICATIONS

The regional trauma system is supported by a coordinated communication system linking and integrating hospitals, life support agencies, the EMS system, and the RTN. There are established procedures for EMS and trauma system communication for major EMS events and multiple jurisdiction incidents that are effectively coordinated with the overall regional response plans. There is a procedure for communications among medical facilities when arranging for inter-facility transfers, including contingencies for radio or telephone system failure.

ACHIEVEMENTS

The RTN reviewed all of Region 1 MCA disaster protocols for the inclusion of mass casualty communications and coordinated regional response. Working with the District 1 HCC (Health Care Coalition), the RTN confirmed that all of regional hospitals have access to, and regularly test the statewide 800 MHz system for disasters. This will continued to be confirmed through the District 1 HCC records and monthly radio tests. The RTN has also confirmed the availability of communication system redundancies in all of the Region 1 hospitals, which will allow facilities to arrange inter-facility transfers in the event their regular source of communication is non-functioning. This will be confirmed through the District 1 Healthcare Coalition records and monthly radio tests.

2015 FOCUS

The 2015 focus for communications will be to continue to ensure that all Region 1 facilities and EMS agencies have access to the statewide 800 MHz system and maintain their interoperable communications. The RTN and RTAC will begin to look at individual facility processes for arranging inter-facility transfers during communication system failures.

MEDICAL OVERSIGHT

The RTN is supported by active EMS medical oversight of trauma communications, pre-hospital triage, treatment, and transport protocols. There is well defined regional trauma system medical oversight integrating the specialty needs of the trauma system and the medical oversight of the overall EMS system. There is a clearly defined, cooperative, and ongoing relationship between regional trauma physician leaders and the EMS system medical directors in the region.

ACHIEVEMENTS

The RTN developed a Medical Oversight Committee which will meet annually to review 100% of Region 1 MCA triage, transport, and care protocols. The group is comprised of MCA medical directors, trauma surgeons, and program managers. The group will also be available to convene upon request to address any

recommended changes found during RPSRO review. This group will make recommended changes to protocols as identified.

2015 FOCUS

The Medical Oversight Committee needs to develop a meeting agenda and plan for reviewing all the Region 1 MCA triage, transport, and care protocols. This committee collaborates with local Medical Control regarding trauma related state model protocols and implementation.

PRE-HOSPITAL TRIAGE CRITERIA

The regional trauma system is supported by system-wide pre-hospital triage criteria. The region has adopted mandatory regional pre-hospital triage protocols to ensure that trauma patients are transported to an appropriate trauma center based on their injuries. The triage protocols are regularly evaluated and updated to ensure acceptable and region-defined rates of sensitivity and specificity for appropriate identification of a major trauma patient.

ACHIEVEMENTS

The RTN reviewed all Region 1 MCA protocols for inclusion of pre-hospital triage guidelines which are consistent with the state system protocol.

2015 FOCUS

The RTN will review these protocols yearly for adherence to state guidelines. The RTN will review the new destination protocol use in each region 1 MCA.

TRAUMA DIVERSION POLICIES

Diversion policies ensure that acute care facilities are integrated into an efficient system to provide optimal care for all injured patients. The regional RTN should ensure that the number, levels, and distribution of trauma facilities are communicated to all partners and stakeholders. The RTN should develop procedures to insure trauma patients are transported to an appropriate facility that is prepared to provide care. The state trauma registry is used to identify and evaluate regional trauma care and improve the allocation of resources.

ACHIEVEMENTS

The RTN and RTAC have created a Data Committee which will monitor, facilitate, and evaluate participation the state trauma registry. In 2014, the Region 1 Data Committee developed and offered training for trauma program managers, registrars, and staff tasked with trauma data entry. This training covered the process of data entry, tools to assist registrars and staff, the National Trauma Data Bank (NTDB) database, ICD 9 trauma code basics, AIS basics and using the trauma registries, including the ImageTrend software. The training was attended by representation from all but 2 Region 1 facilities. Prior to the training, Region 1 had no facilities entering data into the State of Michigan ImageTrend database. After the training, the number of facilities entering data is 4.

2015 FOCUS

The RTN will continue to develop a process to continually assess and update the status of trauma assets, and the trauma level verification/designation of the Region 1 facilities. The registry data collected will be

used to develop the framework for a regional trauma destination and diversion plan which will be revised and updated regularly as Region 1 hospitals obtain verification and designation status.

TRAUMA BYPASS PROTOCOLS

The roles, resources, and responsibilities of trauma care facilities are integrated into a resource efficient, inclusive network that meets standards and provides optimal care for injured patients. The regional trauma plan has clearly defined the roles, resources, and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations (spinal cord injury, burns, pediatrics, other). There is a regional trauma bypass protocol that provides EMS guidance for bypassing a trauma care facility for another more appropriate trauma care facility.

ACHIEVEMENTS

The RTN reviewed all of Region 1 MCA trauma triage protocols for procedures for bypassing of a trauma care facility based on acuity, or the specialty care needs of the patient. The RTN will continue to review these protocols yearly for adherence to state guidelines.

2015 FOCUS

The RTN will continue to work on the development a regional trauma plan, based on ACS recommendations that define the roles, resources, and responsibilities of all acute care facilities treating trauma, and of facilities that provide care to specialty populations. The development of this plan was delayed, anticipating the release of the new ACS resources, and the state of Michigan state model triage and destination protocol. Once the plan has been created, the RTN will assess the plan annually and make changes as the need arises.

REGIONAL TRAUMA TREATMENT GUIDELINES

The regional trauma network ensures optimal patient care through the development of regional trauma treatment guidelines. When injured patients arrive at a medical facility that cannot provide the appropriate level of definitive care, there is an organized and regularly monitored system to ensure that the patients are *expeditiously transferred* to the appropriate, system-defined trauma facility. Collected data from a variety of sources are used to review the appropriateness of all-inclusive regional trauma performance standards, from injury prevention through rehabilitation.

ACHIEVEMENTS

The Data Committee is developing a process to collect pre-hospital and inter-facility transfer data to determine gaps in the information that Region 1 trauma centers have identified as consistently missing or difficult to obtain. The Data Committee is currently working on a survey to be sent out to all Region 1 facilities regarding the linkage of pre-hospital run sheets to the trauma chart. This data will be used to create processes to assist in linking the needed data to ensure timely trauma care. When barriers are identified, the RTN will facilitate an effort to develop tools or processes to address and evaluate them collectively.

2015 FOCUS

The RTN will finalize the RPSRO membership and begin to develop a process for the region MCAs to assure trauma related EMS and transfer patient records are reviewed for quality. The group will need to establish a process for these reviews and a process to document their findings, as well as how the

reviewed data and recommendations will be presented to the RTN and RTAC. The RPSRO will work with the RTN to develop a documentation tool for hospitals to review high acuity trauma patients.

REGIONAL QUALITY IMPROVEMENT PLANS

The RTN/RTAC uses system data to evaluate system performance and regularly reviews system performance reports to develop regional policy. No less than once per year, the RTN generates data reports that are disseminated to all trauma system stakeholders to evaluate and improve system performance.

ACHIEVEMENTS

One identified performance improvement initiative was to enhance communication with the regional partners. A template for a quarterly newsletter was created, which can be utilized to disseminate information to all Region 1 stakeholders regarding educational opportunities, trauma updates, and meetings. Until this format is approved, the RTAC will send out emails to all RTN and RTAC membership regarding educational offerings, regional updates, regional meetings, state updates, and information disseminated by the ACS.

2015 FOCUS

One of the major focuses of 2015 will be to develop processes to disseminate information to the Region 1 trauma partners. This will include pursuing the use of a newsletter, utilizing a web page to post meeting minutes, educational opportunities, and MCA protocol changes.

TRAUMA EDUCATION

The regional trauma network ensures a competent workforce through trauma education standards. The regional trauma network establishes and ensures that appropriate levels of EMS, nursing, and physician trauma training courses are provided on a regular basis.

ACHIEVEMENTS

In 2014 Region 1 had several excellent educational offerings. The Data Committee held a trauma registry class focusing on data entry, tools for registrars, and the use of ImageTrend. Allegiance Hospital held a trauma conference with several national speakers that included attendance from several Region 1 trauma partners. Both Sparrow Hospital and Allegiance offer Coordination of Trauma Nursing Core Courses (TNCC) and Emergency Nursing Pediatric Courses (ENPC). The MCAs in Region 1 has trained their EMS personnel on the protocol change involving the use of spinal immobilization in the pre-hospital setting.

2015 FOCUS

In 2015, the RTAC will utilize a trauma education committee that will be responsible for making recommendations regarding trauma education for regional EMS and hospital personnel.

PREPAREDNESS EDUCATION AND TRAINING

The Region 1 Trauma Network has a very good working relationship with the District 1 Healthcare Coalition (HCC). HRSA rule 325.132(3)(c)(ii)(C)302.10 requires established procedures for EMS and trauma system communications for major EMS events or multiple jurisdiction incidents that are

effectively coordinated with the overall regional response plans. In Region 1 we have written regional EMS communications procedures for these major events and multiple jurisdiction incidents that are coordinated with adjacent jurisdictions, with the overall regional response plan and with the incident management system. The Region 1 RTN has adopted the District 1 HCC's communication plan, to allow for consistent systems. All the Region 1 hospitals also have redundant communication systems, which they exercise and test through the coalition, as well.

Region 1 also has very active education and exercise schedules. Many of the disaster preparedness trainings include a trauma component, and are offered to all healthcare providers in Region 1. One such training is Advanced Burn Life Support (ABLS) and burn Multiple Casualty Incidents (MCI) training offered through the University of Michigan. The State of Michigan has a Burn Surge plan, which addresses the need for 50 burn beds per 1 million people.

The plan utilizes non-traditional burn care resources, which are preferably level 1 or 2 trauma facilities that are not normally burn centers, to provide surge capacity during a multi-casualty incident. These trauma centers have agreed to be responsible for the initial evaluation and stabilization of burn patients, as well as, preparation for transfer, if necessary, during the initial 72 hours. In Region 1, Sparrow Hospital and Allegiance Healthcare have trained to be Burn Surge Facilities. This commitment requires them to have 24-hour coverage with ABLS trained nurses and physicians. In 2014 seventeen medical personnel trained in ABLS.

The ACS also looks for active participation in the multidisciplinary planning and exercising of the triage and medical management of mass casualties following all disasters. Trauma centers must meet the disaster-related requirements of the Joint Commission (CD 20–1). A surgeon from the trauma panel must be a member of the hospital's disaster committee (CD 20–2). Region 1 hospitals had several exercises in 2014 that involved the trauma staff and system. Both Allegiance and Sparrow had exercises testing the evacuation/shelter in place emergency operation plans involving an active shooter within the facility that sent several gunshot victims to the emergency room and utilized the trauma activation process. Also an evacuation/shelter in place exercise was conducted December 18, 2014, with multiple hospitals within Region 1.

BEST PRACTICES / SUCCESSES

One of the most important achievements of 2014 was the regular and active participation at the RTN and RTAC meetings. The RTAC has membership from hospital administration, physicians, nursing, EMS, and MCAs. There have been several requests to be included in RTAC membership. The trauma stakeholders in Region 1 have shown a great interest in participating in the regionalization process and have actively participated in the committee work needed to make it a success.

Another very important achievement is the progress several facilities have made towards verification and designation. The Region's Level 1 trauma facilities receive their re-verification from the ACS-COT. One facility is very close to scheduling their Level 2 visit, 1 facility has their Level 3 visit scheduled, and 1 facility is actively putting the processes in place towards becoming a Level 3 trauma facility. Sparrow Hospital was in the initial group of hospitals designated by the State of Michigan. The ceremony was attended by the Trauma Medical Director, the Trauma Program Manager, and the Chief Executive Officer Dennis Swan. With the predominant number of facilities in Region 1 working towards Level 3 or 4, a workgroup is being formed for the trauma staff from these facilities. This group will be able to share forms and policies, ask questions, and develop a repository of easily accessed resources.

Region 1 has had several other successes including the data/registry course. The class was well attended and a major factor in increasing the number of facilities entering data into ImageTrend. Region 1 has

developed a good working relationship with the regional preparedness Healthcare Coalition, which has helped to ensure the communications systems for trauma stakeholders are interoperable and redundant. This relationship also assures planning and training for mass casualty incidents.

The Region 1 facilities have graciously offered resources to the RTN from room utilization, to plans, to staff time. It is this teamwork, and the work of the RTN and RTAC membership, that has moved the trauma regionalization project forward in Region 1.

SUMMARY

The Region 1 RTN and RTAC worked very diligently in 2014 to build the foundation for our facilities to grow their trauma programs. Twelve out of 13 hospitals made the decision to obtain verification and designation, 4 of these 12 are critical access hospitals. The RTAC membership continues to work on creating processes to assist the facilities with limited resources in this labor intensive process. The staff from Sparrow, a Level I trauma center, and from Allegiance, currently process for Level II, have shared their expertise, processes, and resources to the facilities beginning the verification process. This teamwork has been integral in moving the regionalization process forward. The medical directors from each of the 7 MCAs in Region 1 have shared their time and expertise in this process, and have helped to create the strong foundation the Region 1 trauma network needed to build the program.

As the region moves into the 2015 application year, they are committed to: encouraging and supporting their partners in the verification and designation process, collecting data, process improvements, and educating partners. Region 1 will continue to grow the network, to include all facets of trauma care, and to ensure that optimal trauma care is available and accessible to every person in the region.